

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

ALBEMARLE COUNTY, VIRGINIA (UNINCORPORATED AREAS)

PANEL 125 OF 475

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER 510006 0125 B



ZONE

EFFECTIVE DATE: December 16, 1980

federal emergency management agency federal insurance administration

500-Year Flood Boundary-100-Year Flood Boundary-Zone Designations* With Date of Identification e.g., 12/2/74 100-Year Flood Boundary 500-Year Flood Boundary-Base Flood Elevation Line With Elevation In Feet** Base Flood Elevation in Feet Where Uniform Within Zone** Elevation Reference Mark River Mile **EXPLANATION** ZONE **ZONE A** Lynch River-**ZONE C** action); base flood elevations and flood hazard factors not determined. Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors V1-V30 determined.

KEY TO MAP

ZONE B

(EL 987)

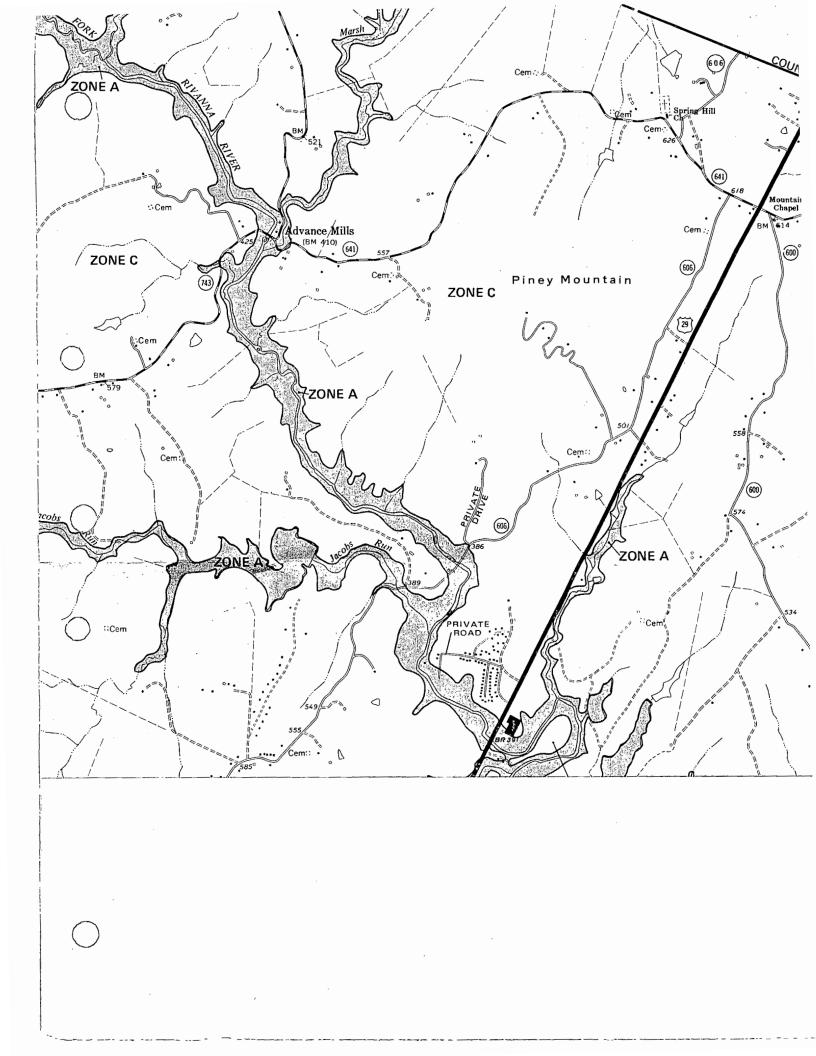
RM7× • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

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A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
АН	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
В	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
С	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
٧.	Areas of 100-year coastal flood with velocity (wave

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COUNTY OF ALBEMARLE

Department of Engineering 401 McIntire Road Charlottesville, Virginia 22901-4596 (804) 296-5861

FLOOD ZONE EVALUATION

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Attachment II

super aic in CONTROLS MANUFACTURING DEPARTMENT GENERAL ELECTRIC COMPANY ● P.O. BOX 8106 ● CHARLOTTESVILLE, VIRGINIA 22908

April 11, 1986

Mr. Stephen R. Wassersug, Director Hazardous Waste Management Division United States Environmental Protection Agency Region III 841 Chestnut Building Philadelphia, PA 19107

Wladimir Gulevich, Ph.D., P.E. Director Bureau of Hazardous Waste Management Commonwealth of Virginia 11th Floor Monroe Building 101 N. 14th Street Richmond, VA 23219

Gentlemen:

The following information is being supplied by General Electric Company, Automation Controls Operations (VAD 98 005 1782), in response to the Environmental Protection Agency's letter, dated February 24, 1986 and received February 28, 1986, requesting information concerning solid waste management units ("SWMU") at the Automation Controls Operations' Seminole Trail (Route 29 North and 606), Charlottesville, Virginia facility:

Response to Item 1

A U.S. Geological Survey map one/inch equals 200 foot enlargement of Topographic map of the G.E. Seminole Trail site including a distance of 1,000 feet around the site is attached. The enlargement was photocopied from the U.S. Geological Survey Map, Photo revised 1978 Earlysville Section. Exhibit I (previously submitted to EPA as part of Hazardous Waste Permit Application in 1980) shows the location of the former Industrial Walter Comment (IWT) facility including Batch Treatment Tank, The Brank, Two Strongs area, and (Solvent) Drum Storage Area. These facilities were relocated in February and March 1982 after approval was received from the EPA and the Commonwealth of Virginia State Water Control Board. (Reference letters dated October 15 and March 9, 1982 - copies attached.) Exhibit II (previously submitted to EPA) shows the location of the present Industrial Alexander (IWT) facility, including Filter Building, Hawardous Waste Storage Building, and IWT Batch Treatment Tank and the recently completed Virgin Chemical Drum Storage Building.

The Equipment Room portion of the Fabrication - Manufacturing (FAB - MFG) Building includes a 5600 gallon capacity fibergles the This tank contains spent (waste) ammonium hydroxide solution (F009). The Equipment Room also contains a solvent recovery still for methylen; colored and one for meren conference.

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Response to Item 2

Attached are copies of the following drawings of the relocated IWT - Hazardous Waste Storage Building complex.

C-301 Industrial Waste Treatment Plant, Filter Building and Batch Tank

C-302 Industrial Waste Treatment Plant, Waste Treatment Process 150 Metric

C-303 Industrial Waste Treatment Plant, Batch Tank Details

C-304 Industrial Waste Treatment Plant, Hazardous Waste Storage Building

C-306 Industrial Waste Treatment Plant, Process Flow Diagram and Details

A-301 Industrial Waste Treatment Plant, Floor Plans, Elevations and Schedules

A-302 Industrial Waste Treatment Plant, Details

S-301 Industrial Waste Treatment Plant, Batch Tank - Plan and Sections

S-302 Hazardous Waste Storage Building and Filter Building - Plans and Sections

A drawing showing the construction of the former IWT Batch Process tank is also attached:

C-305 (Former) Industrial Waste Treatment Plant, Batch Tank (underground) now Photo Lab IWT interim storage tank.

The operation of the former Industrial Waste Treatment Complex was authorized by the Commonwealth of Virginia - State Water Control Board via NPDES permit system to initiate operation in May, 1977. This facility was relocated in February, 1982. The relocated present IWT facility was placed in operation in February, 1982. The new Hazardous Waste Storage Building was placed in operation in March, 1982.

The Industrial Waste Treatment Facility consists of: 1) a 55,000 gallon capacity concrete tank lined with an epoxy material; 2) an agitator; 3) a horizontal pressure filter shell with vertical leaves; and 4) control instrumentation. The pressure filter uses diatomaceous earth as an additional filter medium, and has a filtering area of approximately 500 square feet. The system treats industrial wastewater by precipitation and removal of metallic components as hydroxides and sulfides. The pressure filter discharges the impurities as a solid cake (F006). Note: The previously used 60,000 gallon capacity batch tank is now used as a Photo Lab IWT interim storage tank.

All process equipment from the former IWT facility was relocated to the present IWT facility except the former Batch Process Tank [which now serves as a Photo Lab-IWT Interim Storage Tank] and the Bulk Holding Tank which was emptied, tripled rinsed prior to removal and disposal.

Response to Item 3

Attached is a copy of Virginia Department of Health (VDH) Hazardous Waste Report Part B: Facility Annual Report dated April 1, 1986 that provides a description of waste generated at G.E. Seminole Trail Site in 1985 along with the quantities generated.

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A similar report for 1984 was submitted in February 1985 to VDH - Bureau of Hazardous Waste Management (BHWM). Unfortunately we cannot locate a copy at present. Generator Annual Reports (Ref. EPA Form 8700-13) have been submitted annually since 1982 (for calendar year 1981) to Commonwealth of Virginia BHWM for Seminole Trail Site.

Response to Item 4

The following are summaries of known releases:

I. Date: May 14, 1981

During excavation work the underground feed line to the IWT batch treatment tank was ruptured and discharged approximately 12 GPM for 30 minutes for a total discharge of about 360 gallons containing 60 ppm copper or 0.18 lbs. copper. The IWT plant was not operated this date so that the total discharge of copper was 0.18 lbs.

II. Date: November 24, 1981

During construction earthmoving operations, the inlet lines to the IWT were ruptured and an estimated 520 gallons of untreated plating rinses were released containing 0.26 total pounds of copper and other metals associated with the printed circuit board plating operations.

est. 3.5 gpm X 2.5 hours X 60 min/hr. X 8.35 lb/gal X 60 ppm = 0.26 lbs copper

This day the IWT was operating and discharged (per operating sheet) 0.08 lb/copper

Total 0.34 lb/copper

The NPDES permitted amount for copper was 0.42 lb/day. Therefore, the sum of both the treated and untreated discharges was less than the permit parameter.

Historically, we have used copper as an in-process check on our effluent-during the operation of our Batch IWT facility - because lead and tin have tracked very closely to copper but generally lower in order of magnitude. This fact has been borne out by the test results received from our outside independent laboratory.

III. Date: November 30, 1981

A break/leak was observed in the line running from the Fabrication Building to the IWT Batch Treat Holding Tank, The effluent was leaking out of the line at approximately 2 gallons/minute just south-west of the Batch Tank. Test results provided a Copper level of 10.8 ppm in the spilled area. We estimate that the break lasted for approximately 3 hours.

Calculations: $\frac{2 \text{ gallons}}{\text{min.}} \times \frac{60 \text{ min.}}{1 \text{ hour}} \times 3 \text{ hours} = 360 \text{ gallons}$

360 gallons x 8.35 lbs x $\frac{60}{1,000,000}$ = calculated max. .18 lbs Copper

The HPDES parameter for copper is 0.42 pounds per day. Since all these discharges were released into the same drainage system as our permitted discharge point, we assumed that we did not exceed the NPDES permit value.

IV. Date: December 21, 1981

A break in a potable water line allowed water to flow into the IWT batch treatment tank until it overflowed. It is not known exactly how long the overflow persisted but in our best estimate this diluted solution did not contain a large amount of copper.

V. Date: August 12 and 19, 1983

On Friday, August 12, and on Friday August 19, 1983, minor discharges of approximately 1,000 and 800 gallons, respectively, of IWT influent bypassed the normal treatment process and were discharged into the Herring Branch via the waterway located along the southern edge of the GE property. These unscheduled discharges occurred when the IWT influent sump pumps were inadvertently left off.

We accounted for the volume and analysis of the spillage and via mathematical calculations incorporated these into monthly report. Although it raised the values of the tested components, they were still within the specification parameters.

Although these minor unscheduled discharges, when combined with our normal scheduled discharges, raised the values of the discharged components above the normal monthly averages; the totals were still within NPDES permit parameters. These were reported to State Water Control Board (SWCB) via monthly NPDES report 9/9/83. (Copy attached)

NOTE: For your information the inlet and outlet lines of the low manhole (noted in our letter of September 9, 1983) were connected on Wednesday, November 2, 1983. The purpose of this action was to provide a positive joint and seal the line so that no leakage could occur there in the event the influent sump pumps were accidently turned off.

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please feel free to call if you have any questions. I can be reached on (804) 978-5421 or located by the Security Guard on (804) 978-5222.

Sincerely,

James Morrisard, Engineer

Environmental, Safety and Health Programs

R. Spinazzola, Manager

Manufacturing Engineering

JM/RS/lph 0157b/82

Attachment

CC: R. Magielnicki

J. Neblett

Sign House

R. Swantz

